



Selection Guide for Server Platforms

based on Intel® Xeon™ Processor MP
and Intel® Itanium® 2 Processors



**Take the lead
with high-performance
enterprise servers.**

Streamline your data center with platforms based on the Intel® Itanium® 2 processor

Do More with Less

Nearly every business today is trying to do more with fewer IT dollars. You need powerful, flexible, streamlined technology that will help you:

- **Improve** enterprise server performance on smaller IT budgets
- **Simplify** IT resource management in an increasingly complex environment
- **Respond** faster to dynamic and unpredictable business changes

Intel's most advanced enterprise server platforms give you the power to consolidate and reduce management costs while handling more work.



● Read on to learn how Intel® processor-based platforms boost your computing power and

and Intel® Xeon™ processor MP.

Intel® Itanium® 2-based Systems

The Foundation: the Intel® Itanium® 2 Processor



The Intel® Itanium® 2 processor is uniquely architected for demanding enterprise and technical applications. Itanium 2-based platforms enable businesses and organizations to maximize their return on investments by delivering industry-leading performance at a generally lower cost and with greater choice than proprietary RISC technologies.

Intel® Xeon™ Processor MP-based System

The Foundation: the Intel® Xeon™ Processor MP



The Intel® Xeon™ processor MP features Intel NetBurst® microarchitecture with Intel® Extended Memory 64 Technology, Hyper-Threading Technology, and Enhanced Intel SpeedStep™ Technology, to mid-range and enterprise server platforms. Intel's Xeon processor MP-based platform delivers outstanding levels of throughput, performance and headroom for larger server workloads.

A Quick Look at Intel's High-Performance Platforms

	Intel® Server Platform SR870BN4	Intel® Server Platform SR870BH2	Intel® Server Platforms SR4850HW4 and SR6850HW4
Processors	Up to four Intel® Itanium® 2 processors	Dual Intel Itanium 2 processors	Support for up to four 64-bit Intel® Xeon™ processors MP
Size	4U	2U	4U and 6U rackmount or 6U pedestal
Target Applications	Back-end database and ERP	Clustered HPC front-end applications – business and scientific environment	Server consolidation, mid-tier and 32- and 64-bit database applications

can streamline your data center,
increase your ability to respond to market changes.



Intel® Server Platform SR870BN4

Four Intel® Itanium® 2 processors
in a 4U rack-optimized design

Intel® Server Platform SR870BN4

The Intel® Server Platform SR870BN4 is the ideal back-end server platform for database and ERP solutions that require advanced RAS capability and industry leading price/performance.

Target applications: Database and ERP solutions that require the utmost performance, density, and availability for enterprise applications.

Feature	Benefit
Up to four Intel® Itanium® 2 processors	Latest Itanium 2 processors. Endured more than 25,000 hours of testing and validation.
4U rack-optimized design	Small footprint for high-density environments.
Redundant power supplies and fans Intel® Server Management alerts of potential failures	Extremely high reliability and availability, greatly minimizing server downtime.
Tool-free, hot-swappable power supplies, hard drive bays and fans	Easy installation and service. Install platform in 12 minutes, add memory and processors in under five minutes.
Solid investment protection	Supports future generations of the Itanium processor family.
Memory capacity of 32GB and six PCI-X buses	Able to scale to the largest workloads.



Intel® Server Platform SR870BH2

Two Intel® Itanium® 2 processors
in a 2U rack-optimized design

Intel® Server Platform SR870BH2

The Intel® Server Platform SR870BH2 is optimized for clustered HPC and front-end applications that have large data sets and parallel computing requirements. It provides extremely high reliability and availability in a dense 2U form factor.

Target applications: Clustered high-performance computing (HPC) applications in business or scientific environments that require the highest performance in a dense form factor.

Feature	Benefit
Dual Intel Itanium 2 processors (low-voltage options available)	Latest Itanium 2 processors. Endured more than 25,000 hours of testing and validation. Supports a variety of Itanium processors for multiple application needs.
2U rack-optimized design	Small footprint for high-density environments. Only 75 pounds with easy-access design.
Memory capacity 16GB and four PCI-X buses	Scalability to meet the needs of HPC and front-end applications with large data sets.
Redundant power supplies and fans Intel® Server Management alerts of potential failures	Extremely high reliability and availability, greatly minimizing server downtime.
Hot-swappable power supplies, hard drive bays and fans	Easy installation and service. Install platform in 12 minutes, add memory and processors in under five minutes.
Solid investment protection	Supports future generations of the Itanium processor family.



Intel® Server Platforms SR4850HW4 and SR6850HW4

Up to four 64-bit Intel® Xeon™ processors MP in 4U and
6U rack-optimized and pedestal designs

Intel® Server Platforms SR4850HW4 and SR6850HW4

The Intel® Server Platforms SR4850HW4 and SR6850HW4 are ideal for server consolidation which is important to the IT environment for improving efficiencies and reducing costs while maintaining high levels of reliability, availability and scalability.

Target applications: Server consolidation, mid-tier applications (ERP, SCM, CRM), and 32- and 64-bit database/OLTP applications that require a flexible environment while maintaining serviceability.

Feature	Benefit
Up to four Intel® Xeon™ processors MP	Excellent performance and scalability for the most demanding server applications. The Intel Xeon processor MP has endured more than 25,000 hours of testing and validation.
6U Pedestal or 4U and 6U rack mount form factors	Maximum flexibility. Four 64-bit Intel Xeon processors MP to meet departmental or datacenter needs.
Hot-plug PCI-X, PCI Express, SCSI, ECC, online memory sparing, RAID, and mirroring, 1+1 hot-swap power supplies	Enterprise reliability, availability, and scalability. No server downtime for adding or removing many components.
Memory capacity of up to 64GB	Scalability and flexibility to support memory intensive applications, 32-bit and 64-bit databases and mid-tier applications.
Seven PCI slots with hot-plug PCI Express and PCI-X. Dedicated Intel® Fibre Channel Module slot	I/O bandwidth scalability for intensive I/O needs.



**Intel® Server Products offer the flexibility
your customers need.**

Intel Leads the Way in High-Performance Computing

With Intel's strong foundation supporting you, your systems are backed by industry-leading server technologies, quality engineering, integrated server management tools, and comprehensive service and support.

- **Technology That Defines Innovation** demands a view into the future that balances ideas with perspective. Intel® Server Products deliver progressive technology solutions that support business vision and help accommodate you today and tomorrow.
- **Value That Helps Generate Trust** with inspired designs and extensive testing, Intel® Server Products perform to specification, so you can focus on your business, not your server. And as your business grows, your technology can be transitioned to extend product life.
- **Systems Management That Utilizes Technology**, Intel® Server Management lets you concentrate on your business by utilizing a powerful suite of integrated tools that provide comprehensive management plus proactive alerts to help avert operational crises.
- **Service At Your Fingertips**, When you need service, you want it now. Intel® Server Products are designed for easy serviceability in mind, to help ensure your business is up and running with minimal server downtime.

Know Who's In Your Server. Make It A Leader. Intel® Server Products

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Intel® Extended Memory 64 Technology (Intel® EM64T) requires a computer system with a processor, chipset, BIOS, OS, device drivers and applications enabled for Intel EM64T. Processor will not operate (including 32-bit operation) without an Intel EM64T-enabled BIOS. Performance will vary depending on your hardware and software configurations. Intel EM64T-enabled OS, BIOS, device drivers and applications may not be available. Check with your vendor for more information.

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